

**IOWA DEPARTMENT OF NATURAL RESOURCES
WATER SUPPLY SECTION
CONSTRUCTION PERMIT APPLICATION**

SCHEDULE-9, Clarification-Sedimentation

Date Prepared	Project Identity
Date Revised	

1. Design Data:

Presedimentation and Sedimentation	Unit #	Unit #	Unit #
Type of Unit			
Capacity (gpm)			
Volume (gallons)			
Length (feet)			
Width (feet)			
Depth (feet)			
Detention Time (hours)			
Overflow Rate (gpm/ft ²)			
Sedimentation			
Outlet Weir Loading Rate (gpd/ft)			
Flow-Through Velocity (fpm)			
Mixing and Flocculation			
Type of Unit			
Volume (gallons)			
Detention Time (hours)			
Flocculator Flow-Through Velocity (fpm)			

2. For the following, reference the page of the plans or specifications where the description can be found.

Materials and Construction Details	Page Number
Presedimentation	
Rapid Mix	
Flocculation	
Sedimentation	

3. Are mechanical sludge collectors provided? Yes ☐ No ☐
 If no, what is the side slope of hopper bottom? _____ spec. page no. _____
4. Has a drain been provided for each unit? Yes ☐ No ☐ What is the minimum air gap provided between any drain outlet and the receiving sump? _____ inches
5. Have provisions been made to control the maximum water level? Yes ☐ No ☐
6. Are sedimentation, mixing or flocculation basins located outside of a building? Yes ☐ No ☐ If yes, do they have covers that meet the criteria for ground storage reservoirs Yes ☐ No ☐ spec page no. _____
7. What provisions are being taken to control short circuiting and inlet and outlet velocities? _____ spec. page no. _____
8. What precautions are being taken to prevent clogging of sludge withdrawal piping? _____ spec. page no. _____
9. Diameter of sludge withdrawal pipes: _____ inches spec. page no. _____
10. Are cleanouts provided at all changes in direction of the sludge piping to facilitate cleaning? Yes ☐ No ☐ spec. page no. _____
11. Are all valves located outside of the tanks? Yes ☐ No ☐
12. What is the minimum air gap provided between any sludge outlet and the receiving sump? _____ inches
13. Can the operator observe and sample sludge? Yes ☐ No ☐ spec. page no. _____
14. If sludge lines, collectors or basins are provided with potable water flushing systems, are cross connection control devices provided which meet AWWA standard C506 and are approved by the USC Testing Lab? Yes ☐ No ☐ N/A ☐